REMARKS

Claims 1-29 are pending in this application. By this Amendment, the specification and claims 1, 4, 8, 14, 15, 18, 22 and 27 are amended. New claims 28 and 29 are added. No new matter is added.

I. Personal Interview

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Tran in the October 16, 2004 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

II. Allowable Subject Matter

Applicants appreciate the indication of allowable subject matter in claims 20-23, they being allowable if rewritten in independent form to include all of the features of their base claims and any intervening claims. Claims 20-23, as well as the remaining pending claims, are in condition for allowance for the reasons discussed below.

III. Claim Rejections Under 35 U.S.C. §102

Claims 1-19 and 24-27 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,058,700 to Yamashita et al. (Yamashita). The rejection is respectfully traversed.

Yamashita does not disclose each and every feature recited in the rejected claims. For example, Yamashita does not disclose an exhaust emission control apparatus for an internal combustion engine, comprising *inter alia* . . . a sulfur component retainer agent . . . that takes up and retains a sulfur component contained in the incoming exhaust gas and when the air-fuel ratio of the exhaust gas flowing into the sulfur component retainer agent is substantially stoichiometric or rich of stoichiometry, a controller performs a NOx releasing process of adjusting the air-fuel ratio of an exhaustive gas flowing into the sulfur component retainer agent so that the air-fuel ratio of an exhaust gas flowing into the NOx retainer agent becomes

substantially stoichiometric or rich of stoichiometry if NOx retained by the NOx retainer agent is to be released, and prohibits the air-fuel ratio of the exhaust gas flowing into the sulfur retainer component retainer agent from becoming substantially stoichiometric or rich of stoichiometry if an amount of the sulfur component retained by the sulfur component retainer agent is at least a first predetermined amount, as recited in amended claims 1 and 14. Furthermore, Yamashita fails to disclose an exhaust emission control method for an internal combustion and counter comprising . . . prohibiting the air-fuel ratio of an exhaust gas flowing into the sulfur component retainer agent from becoming substantially stoichiometric or rich of stoichiometry if an amount of the sulfur component retained by the sulfur component retainer agent is at least a first predetermined amount, when the air-fuel ratio of the exhaust gas flowing into the sulfur component retainer agent is substantially stoichiometric or rich of stoichiometry, as recited in amended claim 15, or the similar feature recited in amended claim 27.

As discussed during the personal interview, Yamashita discloses a device for purifying the exhaust gas of an engine having a NOx absorber and a SOx absorber in the exhaust passage. Yamashita discloses that the NOx absorbent 16 performs NOx absorbing and releasing functions in which the NOx absorbent 16 absorbs NOx therein when the air-fuel ratio of the inflowing exhaust gas is lean, (i.e., high 0_2 concentration) and releases absorbed NOx therefrom when the oxygen concentration and the inflowing gas becomes lower (rich air-fuel mixture) (col. 4, lines 33-38; col. 5, lines 14 and 15; col. 5, lines 26-28).

Yamashita further discloses that the exhaust gas contains sulfur containing components, and thus the NOx absorbent absorbs not only NOx, but also sulfur containing components such as SOx (col. 5, lines 46-48). When the temperature of the NOx absorbent 16 is higher than the SOx releasing temperature of the NOx absorbent 16, the sulfate produced by SOx in the NOx absorbent can be decomposed by making the air-fuel ratio of the

inflowing exhaust gas rich or stoichiometric. Thus, the sulfuric acid ions of the sulfate are released from the absorbent in the form of SO_3.

When SOx is to be released from the SOx absorbent 21, the temperature of the SOx absorbent 21 is made higher than the SOx releasing temperature, and the air-fuel ratio of the inflowing exhaust gases made rich, and the flow rate is made lower than a predetermined flow rate (col. 12, lines 57-63). Yamashita further discloses that the SOx absorbent 21 absorbs not only SOx, but also NOx, when the air-fuel ratio of the inflowing exhaust gas is lean. The absorbed NOx is released therefrom and is reduced when the air-fuel ratio of the inflowing exhaust gas is made rich, i.e., when the SOx releasing operation of the SOx absorbent 21 or the NOx releasing operation of the NOx absorbent 16 is in process (col. 14, lines 22-28).

Therefore, Yamashita discloses that the air-fuel ratio of the exhaust gas flow into the NOx absorbent 16 is made rich or stoichiometric temporarily when the temperature of the NOx absorbent 16 is higher than the SOx releasing temperature, to thereby relieve SOx from the NOx absorbent 16 (col. 6, lines 5-16). In other words, during the NOx releasing process, Takeshita discloses making the air-fuel ratio of the exhaust gas richer. In contrast, the claims recite prohibiting the air-fuel mixture of the exhaust gas flowing into the sulfur component retainer agent from becoming substantially stoichiometric or rich of stoichiometry.

Regarding the rejection of claim 2, as discussed during the personal interview, Yamashita discloses an exhaust passage that causes exhaust gas to bypass the SOx retainer agent 21. In contrast, claim 2 recites a bypass passage that causes an exhaust gas to bypass the NOx retainer agent. Thus, Yamashita does not disclose each and every feature recited in the rejected claim or the claims depending therefrom. Therefore, withdrawal of the rejection of claims 1-19 and 24-27 under 35 U.S.C. §102(b) is respectfully requested.

IV. New Claims

Claims 28 and 29 are allowable over the applied reference as Yamashita fails to disclose or suggest the exhaust emission control apparatus according to claim 1, wherein during a process of releasing NOx, the controller performs the NOx releasing process and prohibits the air-fuel ratio of the exhaust gas flowing into the sulfur component retainer agent from becoming substantially stoichiometric or rich of stoichiometry if an amount of the sulfur component retained by the sulfur component retainer agent is at least a first predetermined amount. Furthermore, Yamashita fails to disclose or suggest the exhaust emission control method according to claim 15, wherein the prohibiting the air-fuel ratio of an exhaust gas flowing into the sulfur component retainer agent from becoming substantially stoichiometric or rich of stoichiometry if an amount of the sulfur component retained by the sulfur component retainer agent is at least a first predetermined amount when the air-fuel ratio of the exhaust gas flowing into the sulfur component retainer agent is substantially stoichiometric or rich of stoichiometry.

V. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-29 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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